

AMENDMENTS TO THE DRAWINGS

Attached hereto are three (3) sheets of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

**Figs. 11-14 have been added for the Examiner's
Consideration.**

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.

REMARKS

Claims 38-78 are pending in this application. Claims 38 and 67 have been amended and claims 75-78 have been added. Claims 1-37 were canceled by a previous amendment. Claims 38 and 76 are independent. Reconsideration of this application, as amended, is respectfully amended.

Objection to the Drawings

The Examiner indicates that Figures 9 and 10 were received as an attachment to the Amendment dated June 22, 2004, but Figures 11-14 were not received. Attached to the present Amendment are three (3) sheets of drawings, including Figures 11-14. Applicants submit that additional Figures 11-14 (together with previously submitted Figures 9 and 10) overcome the Examiner's drawing objection for the reasons set forth on page 13 of the Amendment dated June 22, 2004.

In view of the above, Applicants submit that the drawings are in proper form. Therefore, the Examiner's drawing objection in the Office Action dated March 22, 2004 has been obviated.

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 38, 29, 52 and 53 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Serbousek, U.S. Patent No. 5,098,434. Claims 38, 39, 55-61, 63, 67 and 73 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Rambert et al, GB 2 033 755 A. Claims 38, 52-54 and 67 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Vrespa, U.S. Patent No. 5,593,410. Claims 38, 52-54 and 56-67 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Hansson et al., U.S. Patent No. 5,558,838. Claims 38, 40-54, 67 and 74 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Kaneko, U.S. Patent No. 5,863,167. Claims 68-72 stand rejected under 35 USC §103(a) as being unpatentable over Rambert et al., GB 2 033 755 in view of Sotereanos, U.S Patent No. 6,284,002. These rejections are respectfully traversed.

The present invention is directed to a femur fixture for a hip-joint prosthesis. Independent claim 38 recites a combination of elements including "an intraosseous anchoring structure" and "a collar section." In addition, independent claim 38 recites "the intraosseous anchoring structure being formed from a single, one-piece member," "the screw thread profile extending from said frusto-

conical proximal section towards the distal end," said frusto-conical proximal section being shorter than said proximal cylindrical section," and "said collar section extending generally radially outwardly from the intraosseous anchoring structure." Applicants respectfully submit that the references relied on by the Examiner fail to teach or suggest the presently claimed invention.

With regard to the Serbousek reference relied on by the Examiner, this reference is directed to a porous coated bone screw. Referring to Figure 2 of this reference, the Examiner considers the head portion 22 of the screw 20 to be the frusto-conical proximal section of the presently claimed invention. In addition, the Examiner considers the threaded member 26 to be the screw thread profile of the presently claimed invention. However, the threads on the threaded member 26 are spaced from the head portion 22. In view of this, Serbousek fails to disclose the recitation "the screw thread profile extending from said frusto-conical proximal section towards the distal end" as recited in claim 38. Therefore, Serbousek fails to anticipate independent claim 38 of the present invention.

In addition, referring to Figure 1 of Serbousek, there is no element attached to the head 22, since the head 22 includes a slot

32 formed therein. In view of this, Serbousek fails to disclose a collar section "extending generally radially outwardly from the intraosseous anchoring structure" as recited in independent claim 38. Therefore, Serbousek fails to anticipate independent claim 38 of the present invention for this additional reason.

With regard to the Rambert et al. reference relied on by the Examiner, this reference describes a hip joint prosthesis. The prosthesis comprises a threaded rod 7 and a recall screw 15. The Examiner considers the threaded rod and the recall screw 15 to be the frusto-conical proximal section and the proximal cylindrical section, respectively. However, as can be clearly understood from the Figure of Rambert et al., these elements are formed from two separate elements that are threaded together. In view of this, Rambert fails to disclose "the intraosseous anchoring structure being fomed from a single, one-piece member" as recited in independent claim 38 of the present invention. Therefore, Applicants submit that the Rambert et al. reference fails to anticipate independent claim 38 of the present invention.

With regard to the Vrespa reference relied on by the Examiner, this reference describes a general screw device for fixing a prosthesis, such as a plate, to the outside of a bone. Referring to

Figure 8, the Examiner considers the head of the screw and the threads 23 to be the frusto-conical proximal section and the proximal cylindrical section of the presently claimed invention. However, the threads 23 do not extend "from said frusto-conical proximal section towards the distal end" as recited in independent claim 38. As can be clearly understood from Figure 8, the threads terminate at a spaced location from the frusto-conical portion of the head of the screw. Therefore, Applicants submit that the Vrespa reference fails to anticipate independent claim 38 for at least this reason.

To the Extent the Examiner considers the frusto-conical connection 20 of Vrespa to be the frusto-conical proximal section of the presently claimed invention, Applicants submit that this portion of the screw 80 of Vrespa cannot be considered the frusto-conical proximal section, since it is not located "at the proximal end" of the intraosseous anchoring structure as recited in independent claim 38. In addition, the thread 23 would then be located at the proximal end of the connection 20 and not the distal end of the connection 20 as required by independent claim 38.

Furthermore, Applicants submit that there is no frusto-conical proximal section at all in Vrespa. The Examiner asserts that the

head-portion of Vrespa could be embedded in a countersink in the bone; however, there is no support for this position in the Vrespa reference. To the contrary, referring to column 14, lines 51-53 of Vrespa, it is stated "... the third thread 23 can be provided only if a counteracting element 82 is present, such as a plate resting on the surface of the femur cortical bone 50." Therefore, it is obvious that the implant according to Figure 8 of Vrespa cannot work without the counteracting element 82. the feature of the counteracting element must be interpreted as a separate object, not as merely a way of preparing the bone, especially when taking the disclosure as a whole into account.

In addition, referring to Figure 8 of Vrespa, there is no element attached to the head of the screw. In view of this, Vrespa also fails to disclose a collar section "extending generally radially outwardly from the intraosseous anchoring structure" as recited in independent claim 38. Therefore, Vrespa fails to anticipate independent claim 38 of the present invention for this additional reason.

With regard to the Hansson et al. reference relied on by the Examiner, this reference describes a dental fixture having a conically flaring portion 10 and a generally cylindrical body 1.

However, there is no element attached to end of the flaring portion 10. In view of this, Hansson et al. fails to disclose a collar section "extending generally radially outwardly from the intraosseous anchoring structure" as recited in independent claim 38. Therefore, Hansson et al. fails to anticipate independent claim 38 of the present invention.

With regard to the Kaneko reference relied on by the Examiner, this reference describes a drilling screw for fixing gypsism boards to thin steel plates. The Examiner considers the portion between the parallel thread part 13 and the trumpet head 12 to be the frusto-conical proximal section of the presently claimed invention. However, there is no element attached to end of this portion that extends "generally radially outwardly from the intraosseous anchoring structure" as recited in independent claim 38. The trumpet head 12 is attached to this portion; however, the trumpet head 12 is not a collar as recited in independent claim 38. Furthermore, the trumpet head 12 does not extend radially, it extends generally longitudinally while tapering outwardly. Therefore, Hansson et al. fails to anticipate independent claim 38 of the present invention.

With regard to dependent claims 39-74, Applicants respectfully submit that these claims are allowable due to their dependence on independent claim 38, as well as due to the additional recitations in these claims.

With regard to the Sotereanos reference relied on by the Examiner, this reference has been relied on for a teaching of an inclined collar in the Rambert et al. reference. Sotereanos fails to provide a teaching to make the Rambert et al. threaded rod 7 and recall screw 15 in a single piece. Therefore, Sotereanos fails to make up for the deficiencies of Rambert et al.

In view of the above amendments and remarks, Applicants respectfully submit that claims 38-74 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

Additional Claims

Additional claims 75-78 have been added for the Examiner's consideration. Applicants respectfully submit that additional dependent claim 75 is allowable due to its dependence upon

independent claim 38 as well as due to the additional recitations in this claim.

With regard to additional independent claim 76, Applicants submit that this claim defines the present invention over the references relied on by the Examiner due to the collar section and tapered mounting section recited in this claim. In addition, claims 77 and 78 are allowable due to their dependence upon independent claim 77 as well as due to the additional recitation as in these claims.

Favorable consideration and allowance of the above-identified application are therefore respectfully requested.

CONCLUSION

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but merely to show the state-of-the-art, no further comments are deemed necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

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It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

Applicants respectfully petition under the provisions of 37 C.F.R. § 1.136(a) and § 1.17 for a one-month extension of time in which to respond to the Examiner's Office Action. The Extension of Time Fee in the amount of \$120.00 is attached hereto.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By 

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Attachment(s): Three (3) sheets of drawings

(Rev. 02/12/2004)